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Little et al.

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(54) **STORM SHIELD FOR BATHING STRUCTURE**

(71) Applicant: **LCR Innovations, LLC**, Brentwood, TN (US)

(72) Inventors: **William R. Little**, Franklin, TN (US); **Henry Ross**, Brentwood, TN (US)

(73) Assignee: **LCR Innovations, LLC**, Brentwood, TN (US)

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(60) Provisional application No. 62/031,598, filed on Jul. 31, 2014.

(51) **Int. Cl.**

E06B 5/00	(2006.01)
A47K 3/00	(2006.01)
E04H 9/00	(2006.01)

(52) **U.S. Cl.**

CPC ***E06B 5/003*** (2013.01); ***A47K 3/001*** (2013.01); ***E04H 9/00*** (2013.01)

(58) **Field of Classification Search**

CPC E04H 9/00; A47K 3/001; E06B 5/003
USPC 4/498, 580, 546, 609
See application file for complete search history.

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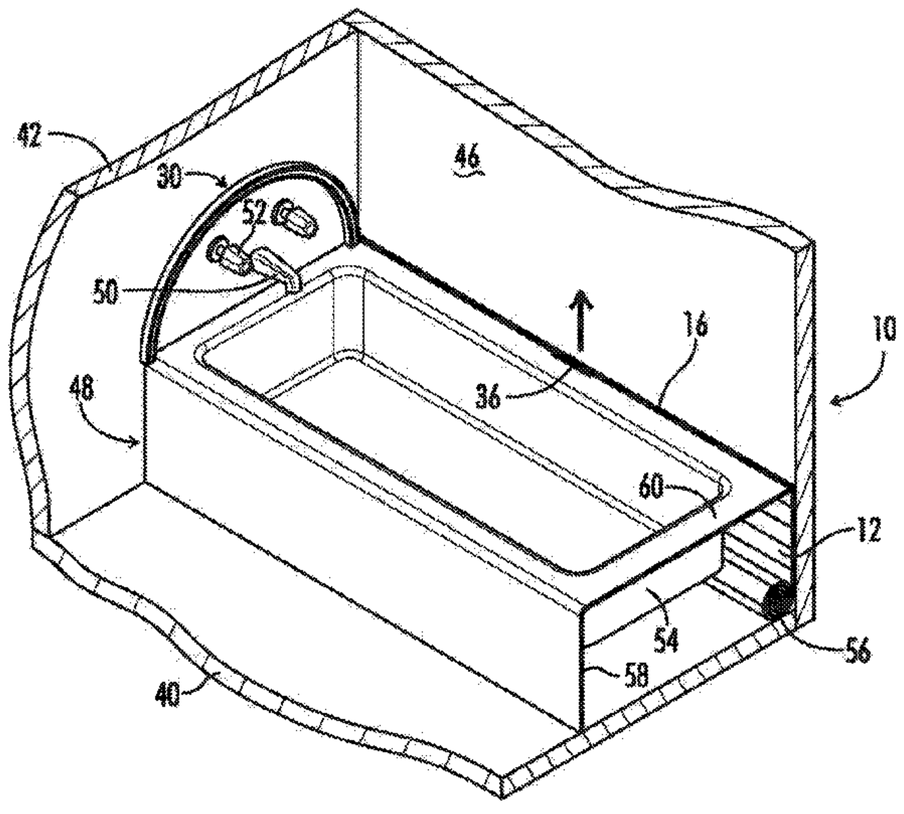
Primary Examiner — Huyen D Le
(74) *Attorney, Agent, or Firm* — Waller Lansden Dortch & Davis LLP; Matthew C. Cox

(57) **ABSTRACT**

A storm shield apparatus for protecting persons, animals, or property within a bathing structure includes a retractable shield that is selectively moveable between a stowed position and a deployed position. The shield is moveable along first and second tracks. In some embodiments, the first and second tracks are disposed on opposing longitudinal end walls proximate the bathing structure, and the shield includes flexible roll-top shield sections. A trough with multiple panels may be positioned under the bathing structure to provide an additional barrier to prevent flying debris from penetrating the bathing structure from its sides, longitudinal ends or bottom. The trough mates with the shield in some embodiments to form a protective enclosure.

20 Claims, 12 Drawing Sheets



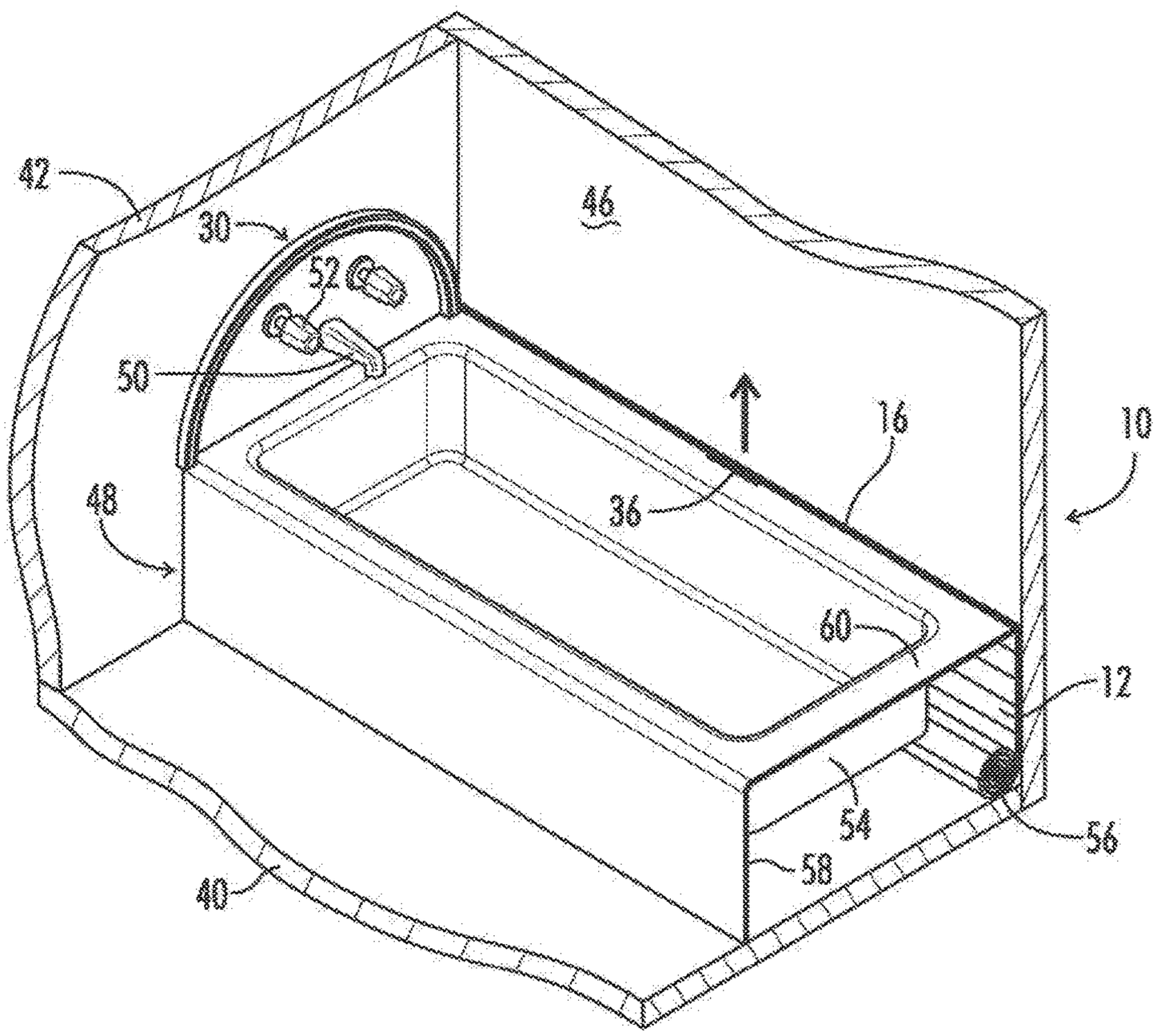


FIG. 1

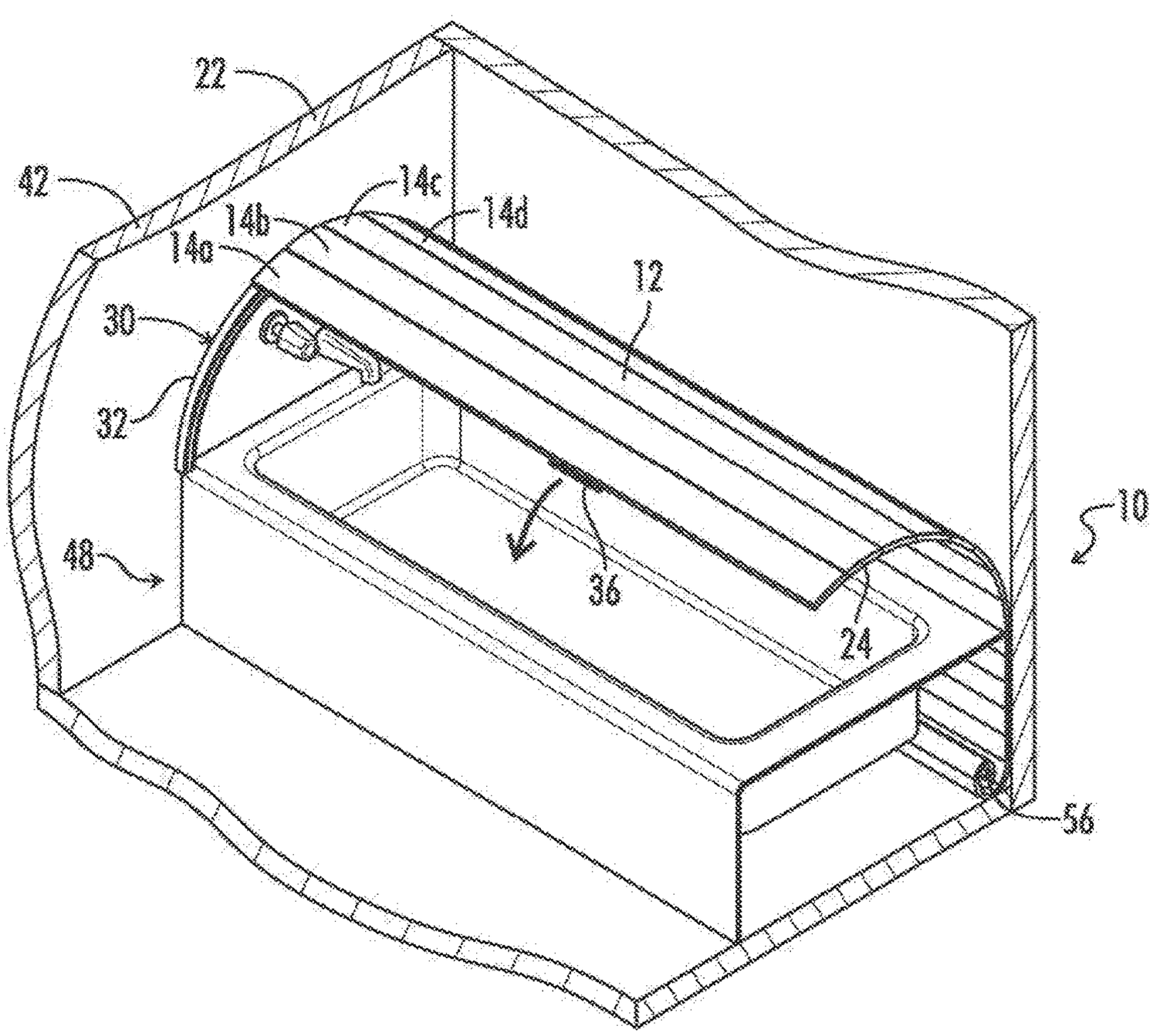


FIG. 2

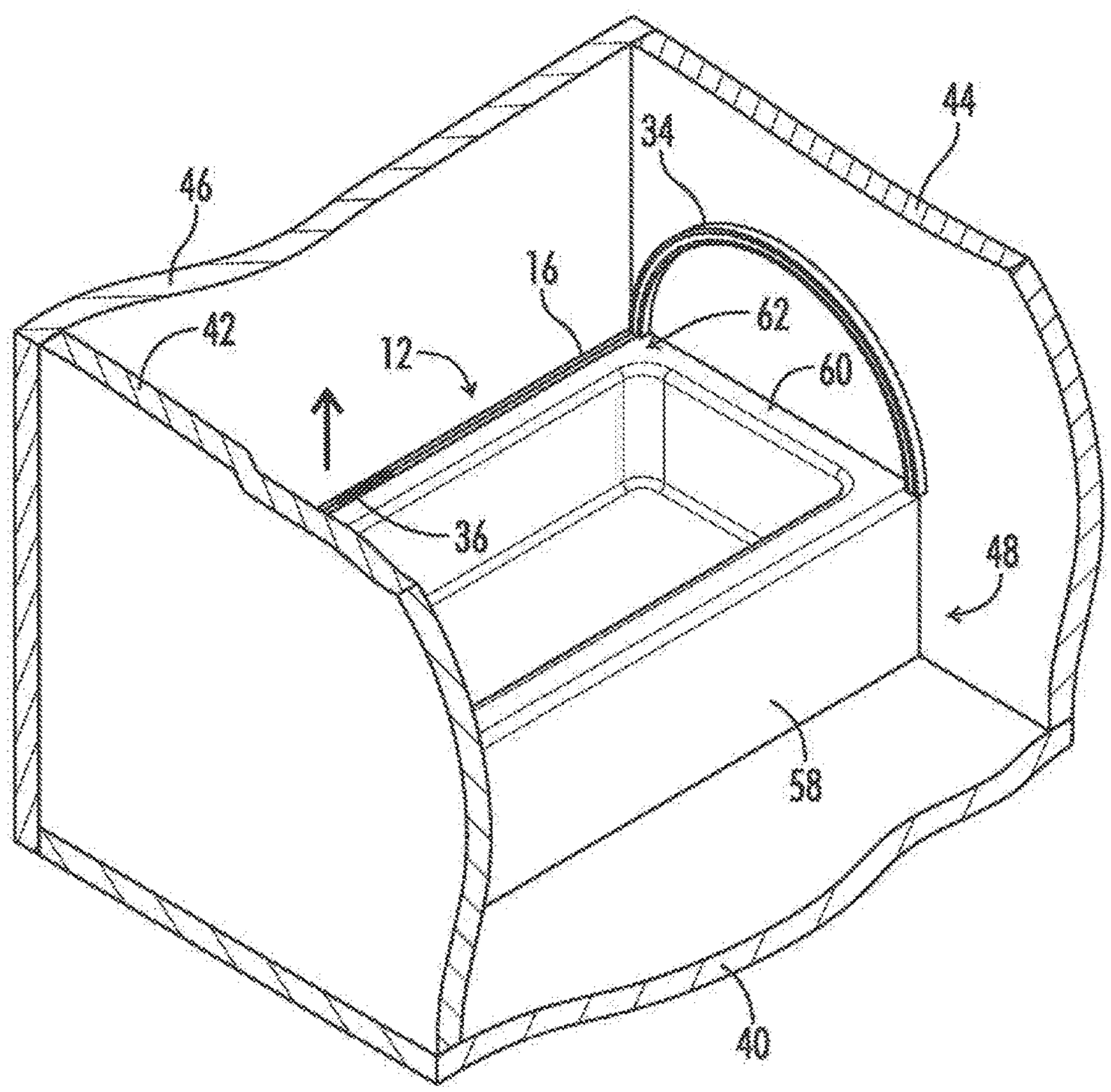


FIG. 3

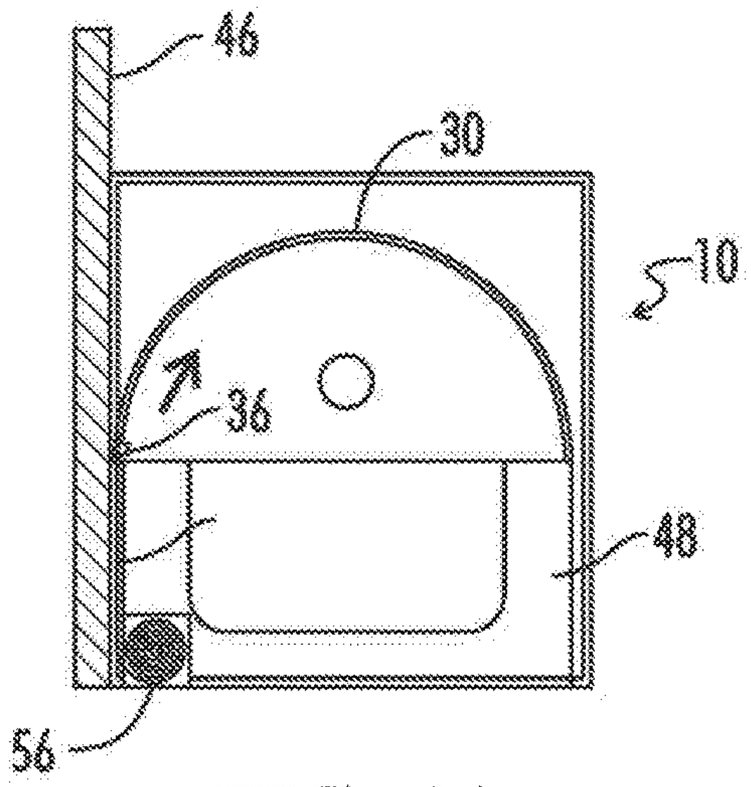


FIG. 4A

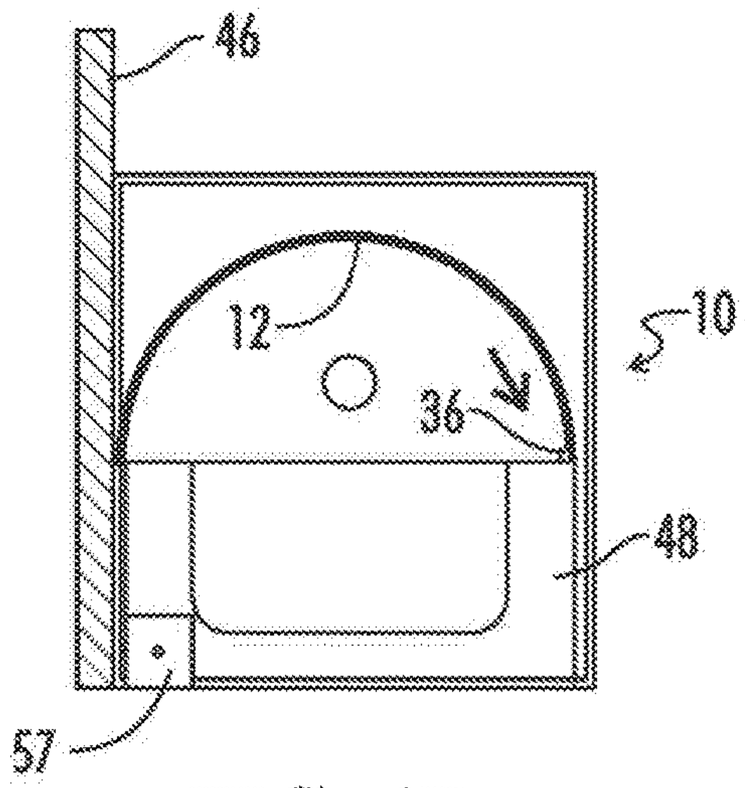


FIG. 4B

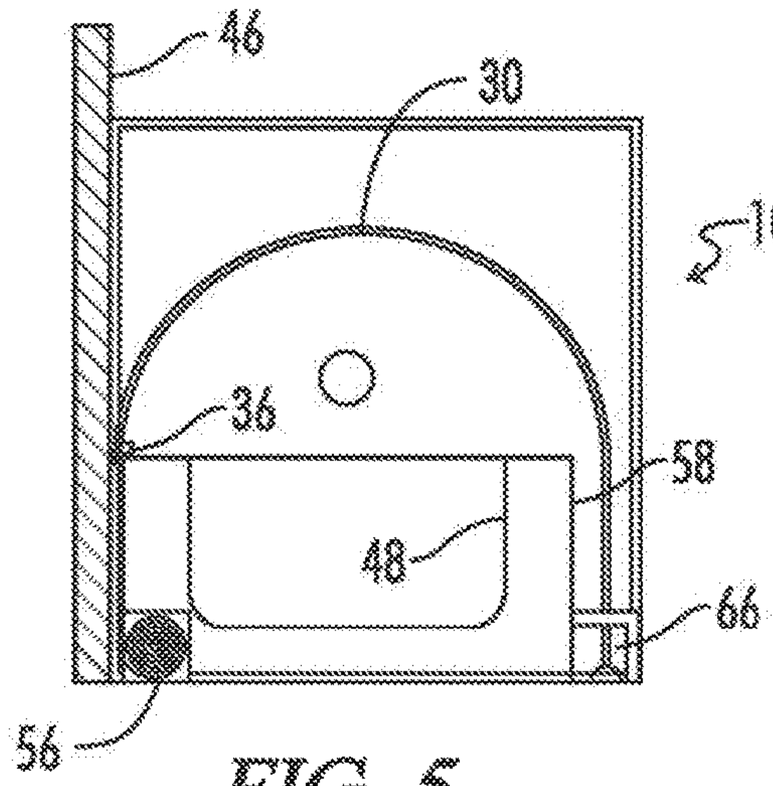


FIG. 5

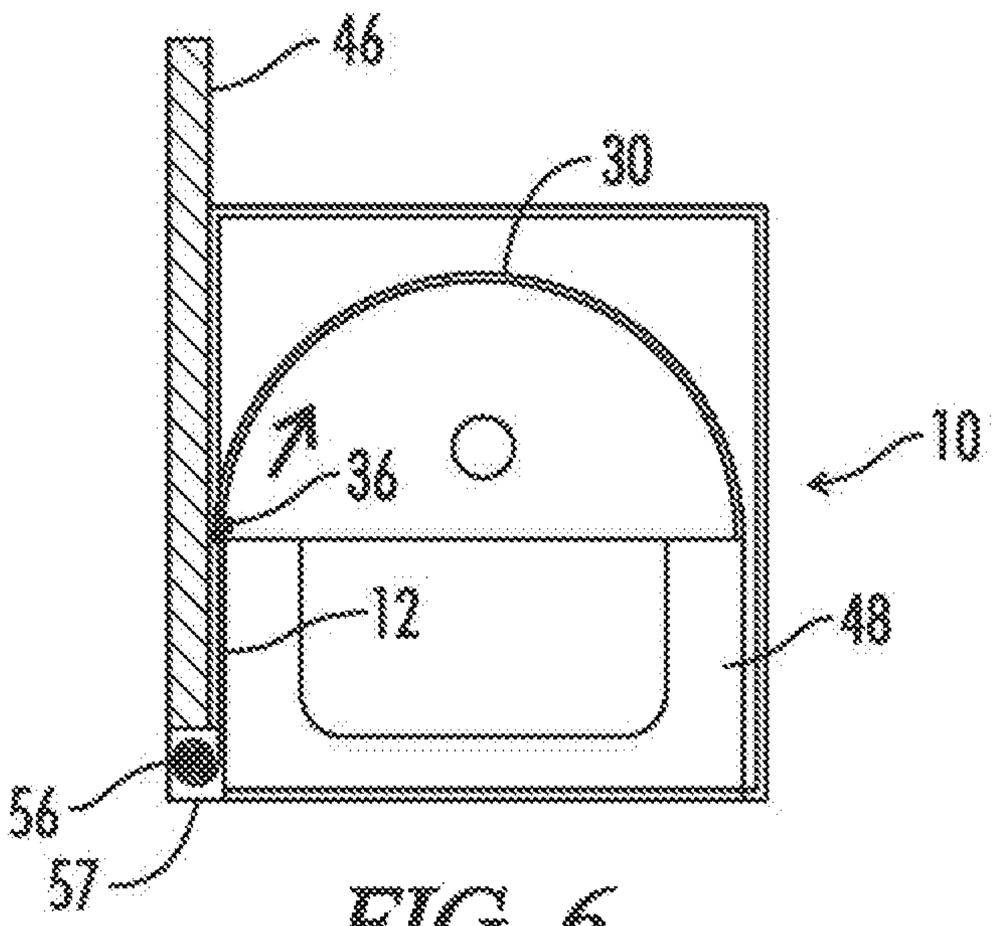


FIG. 6

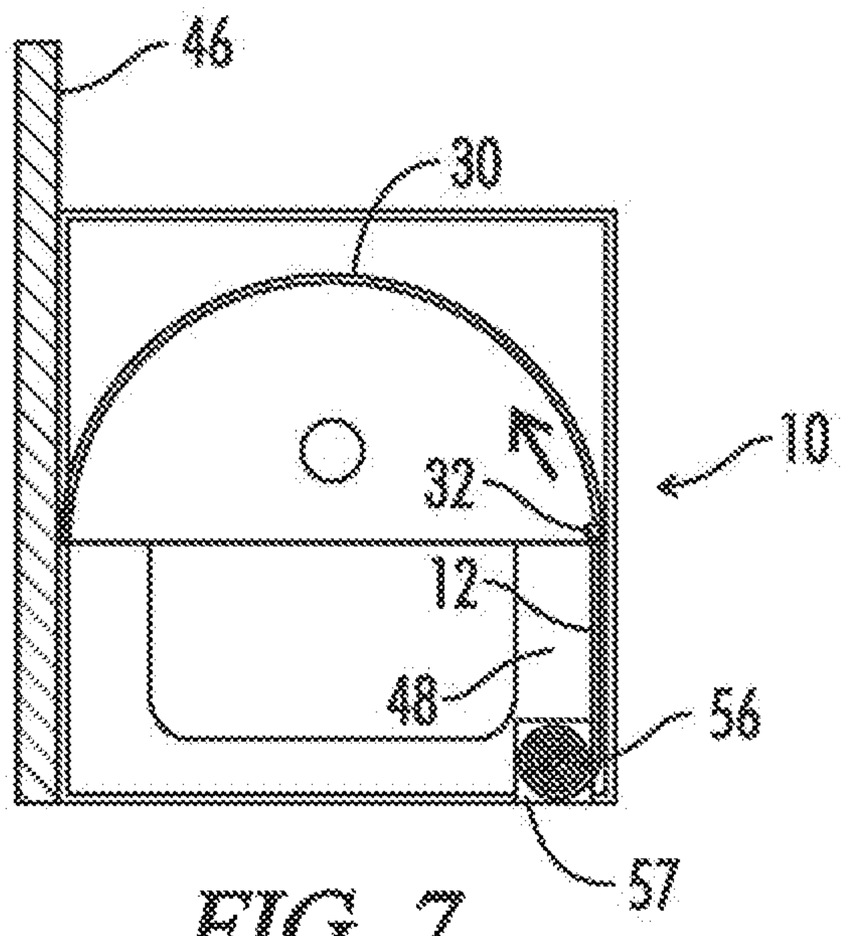


FIG. 7

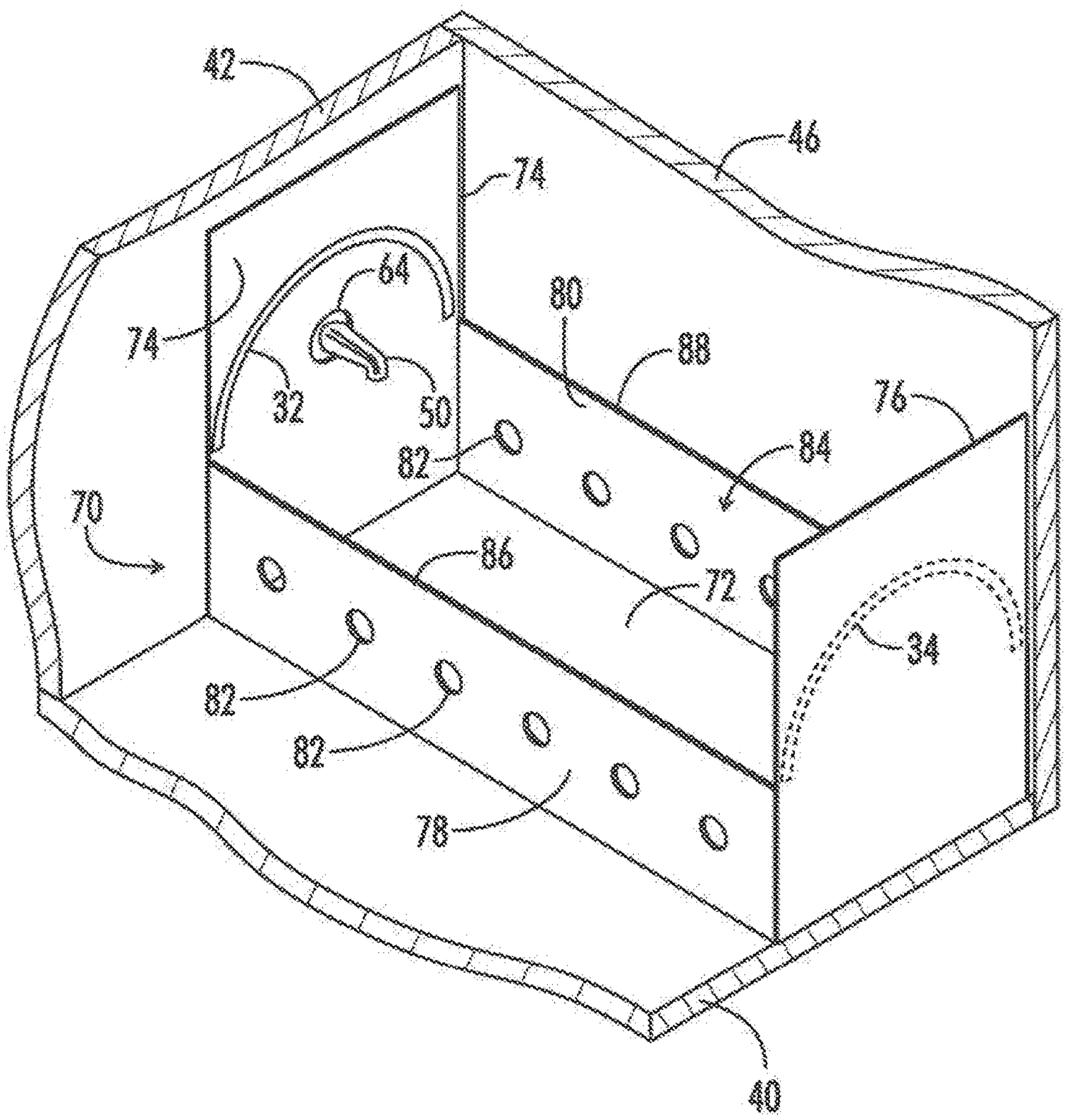


FIG. 8

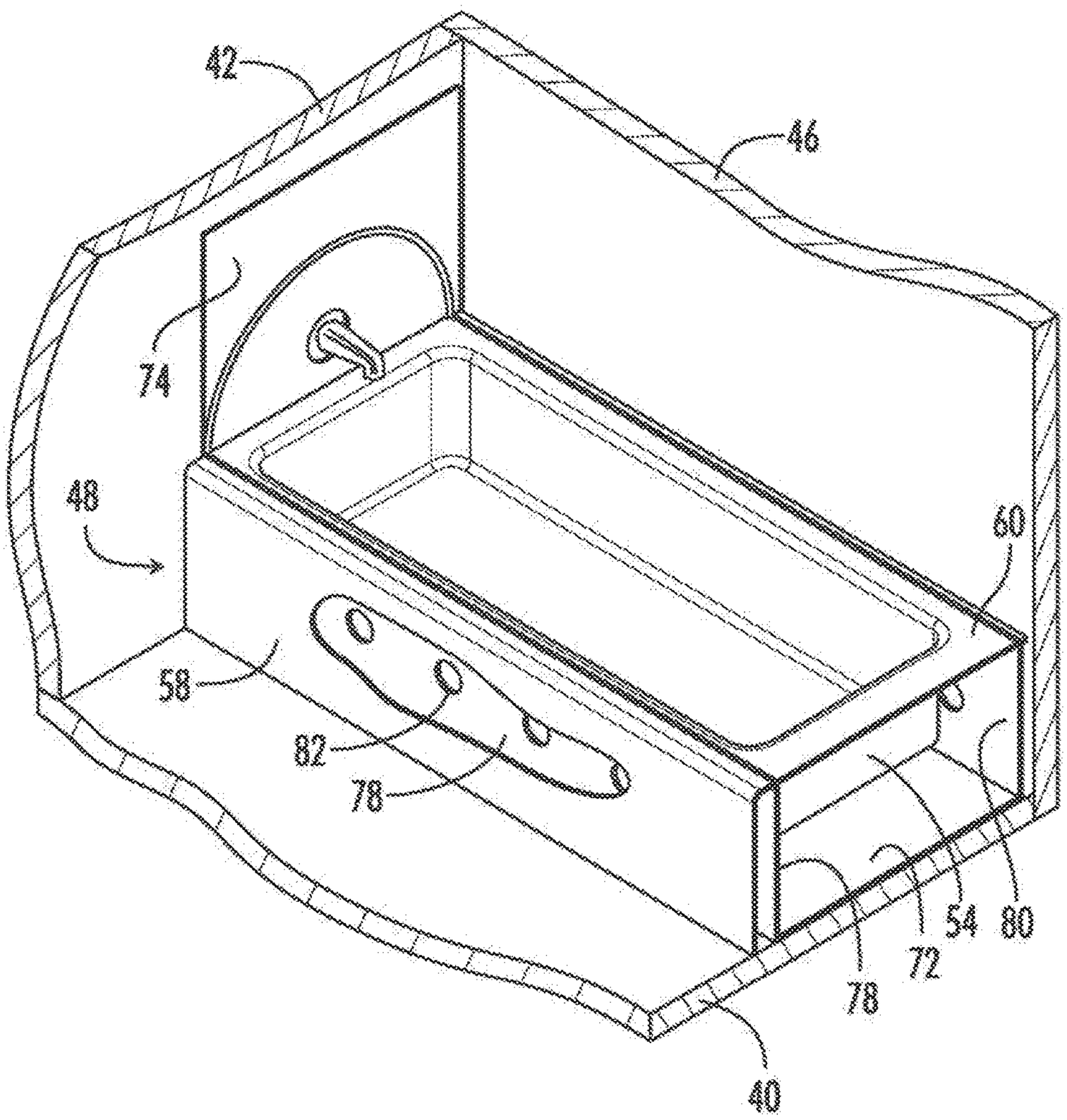


FIG. 9

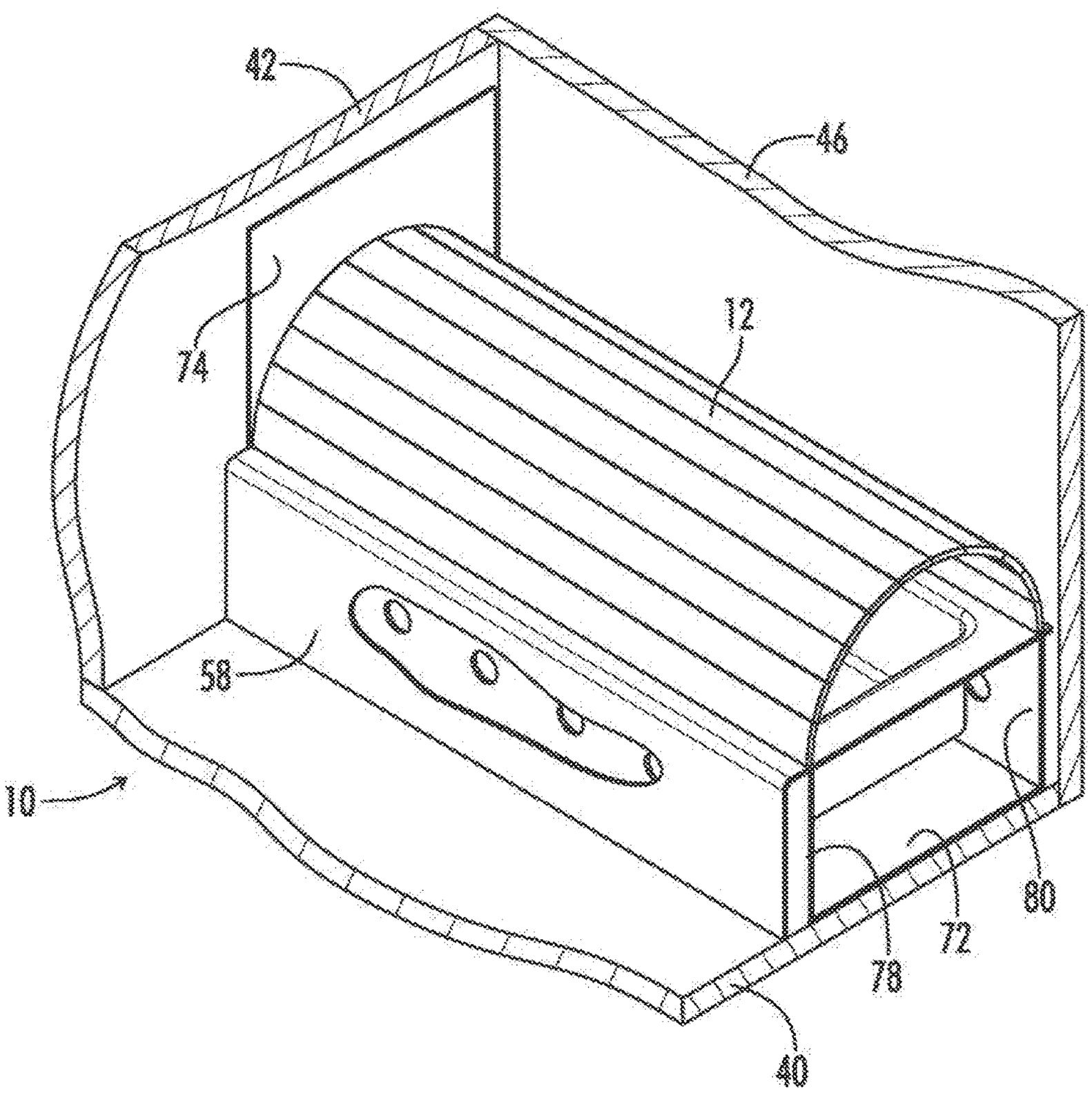


FIG. 10

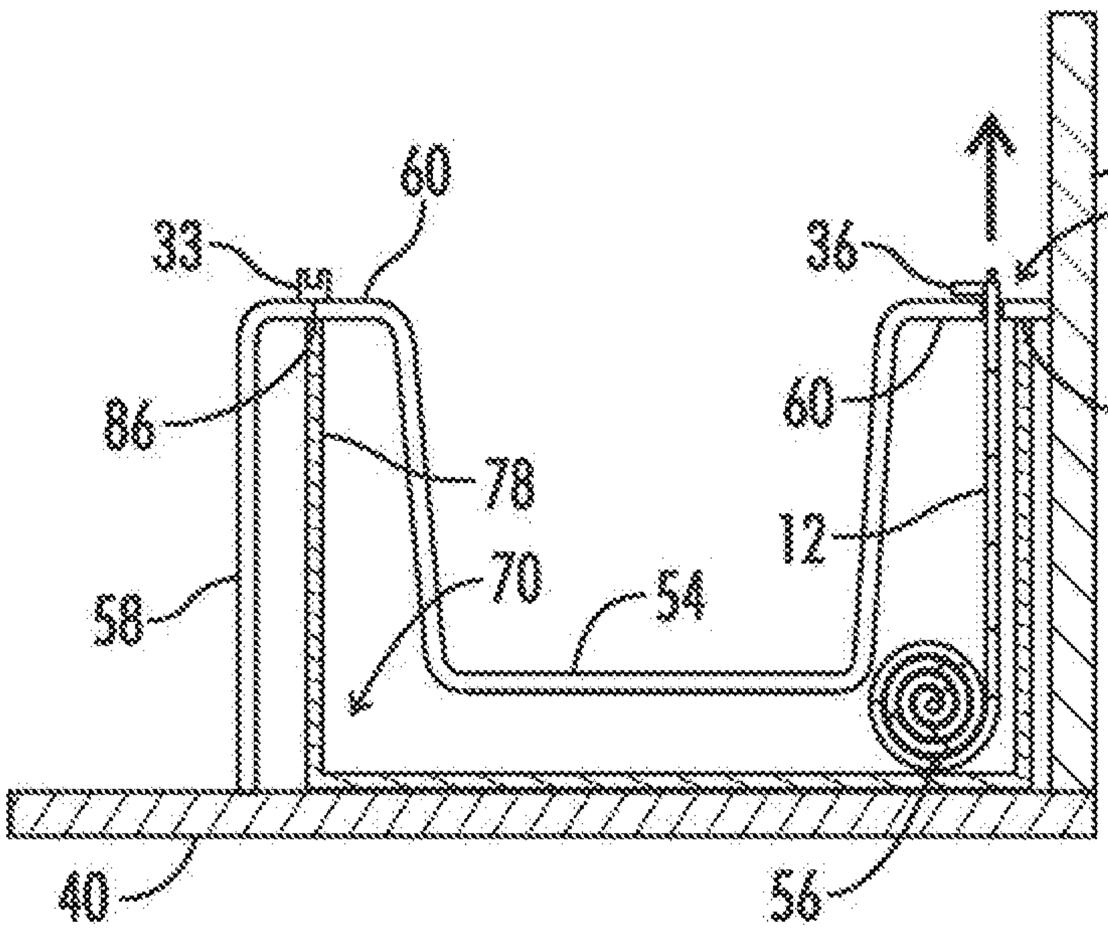

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FIG. 11

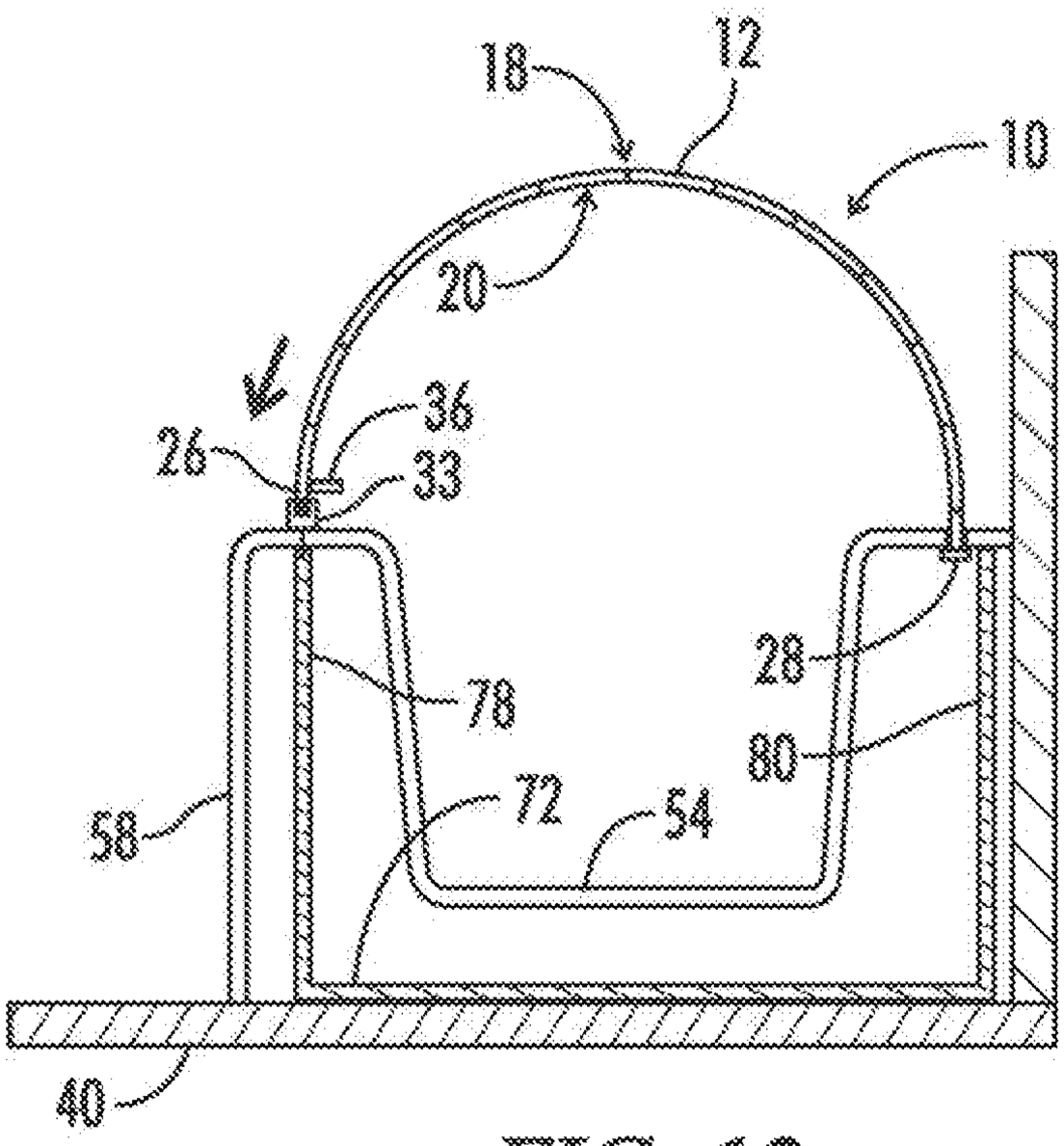
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FIG. 12

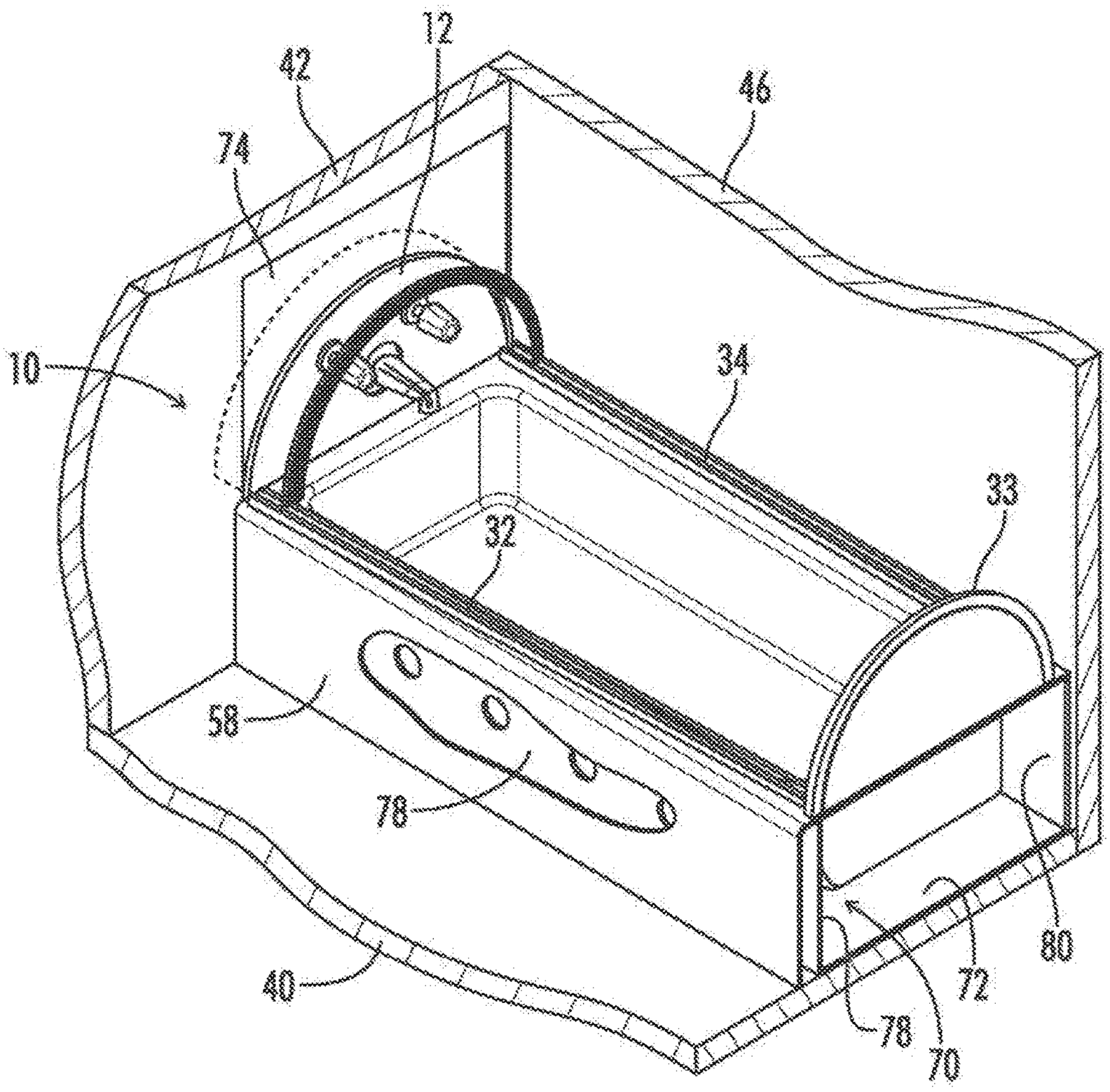

FIG. 13

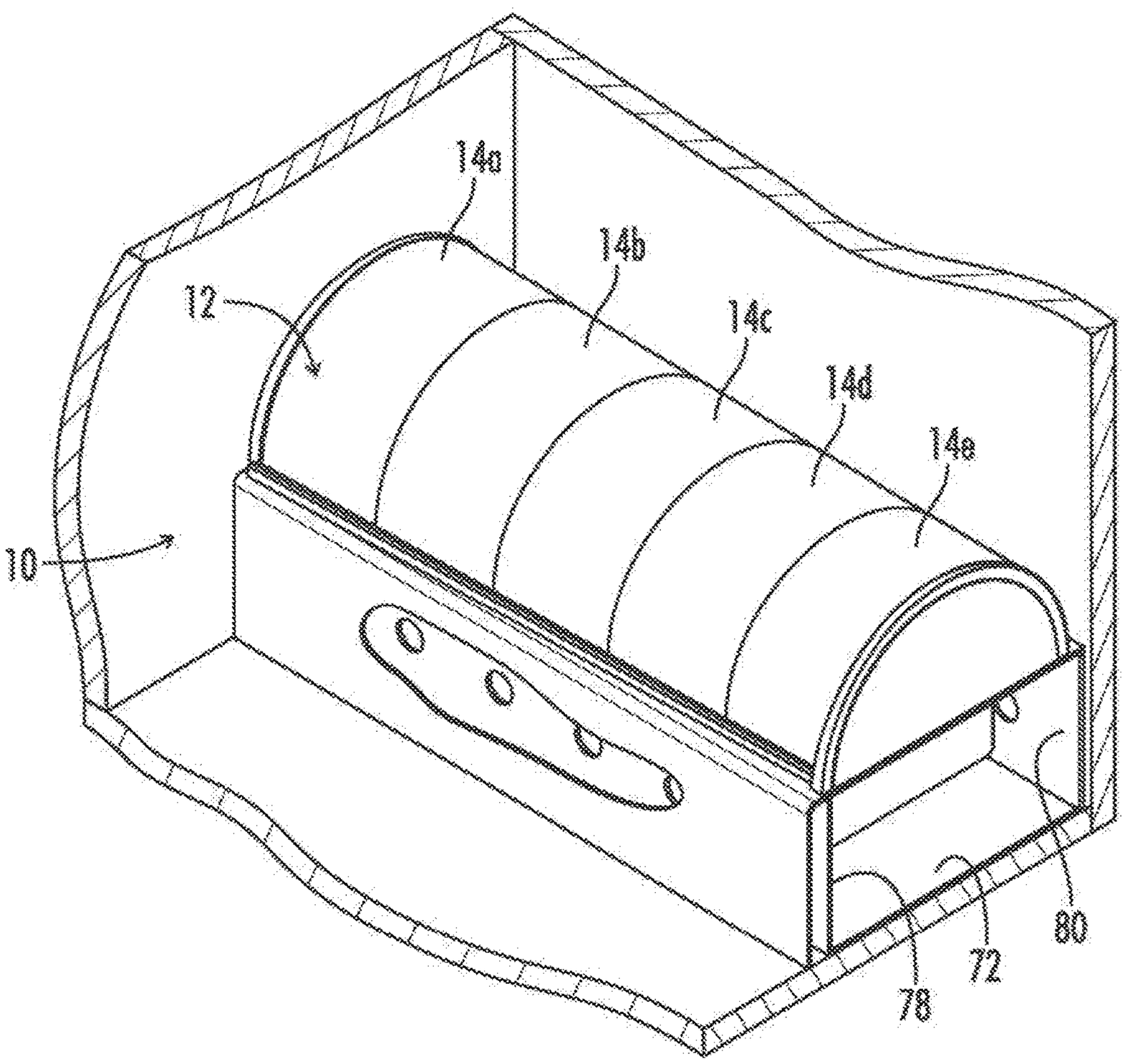

FIG. 14

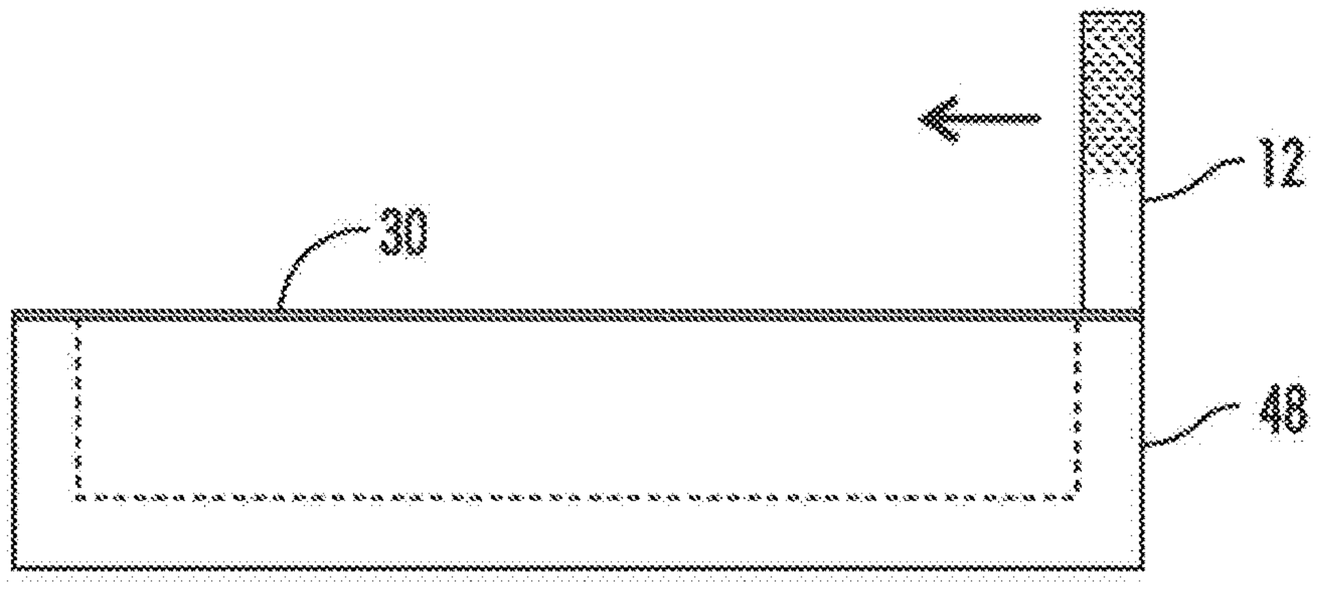

FIG. 15

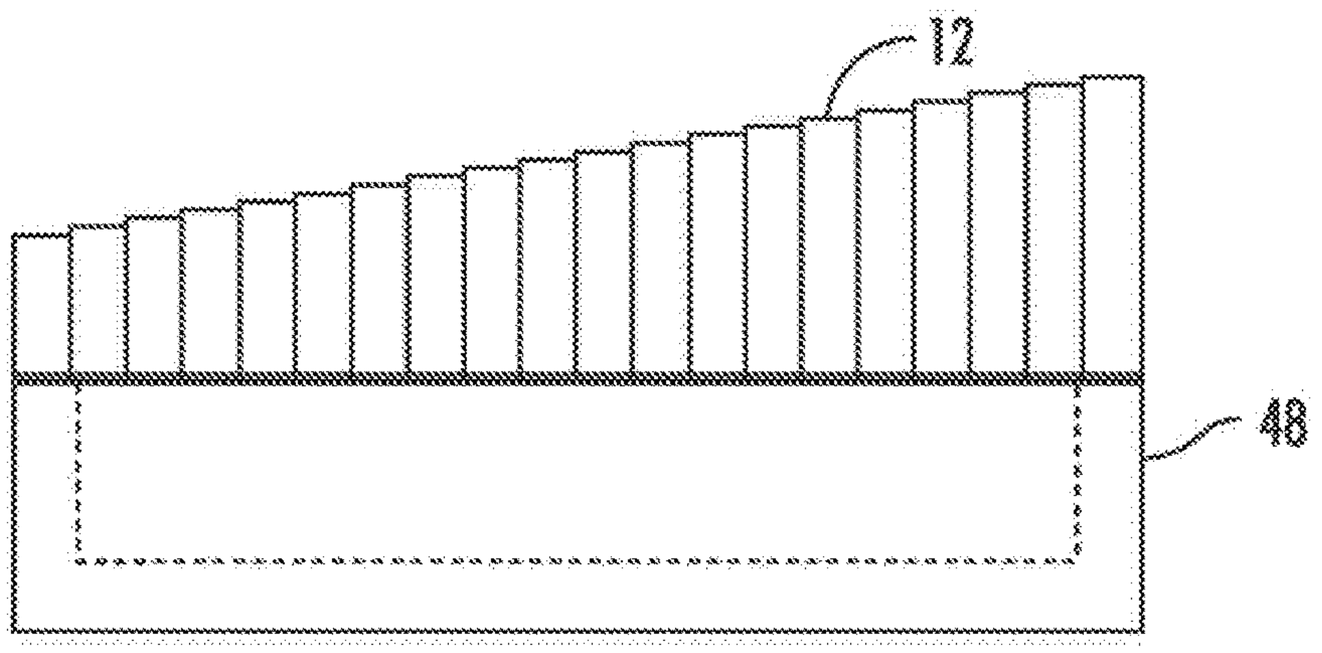

FIG. 16

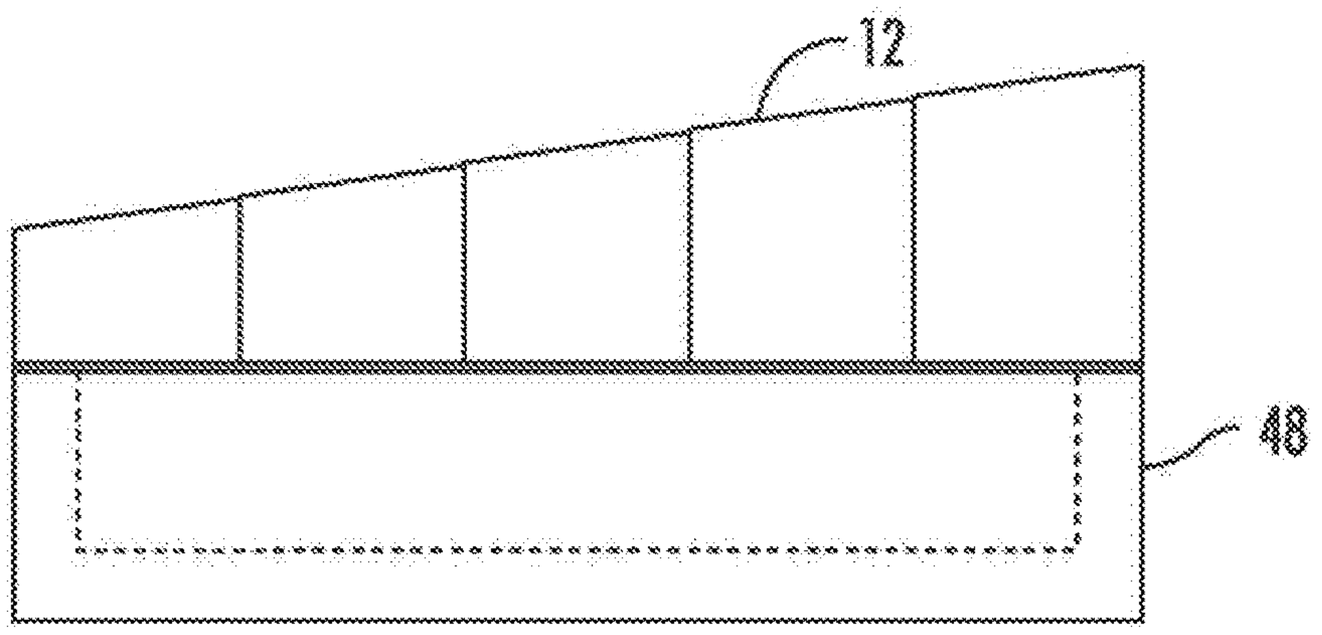

FIG. 17

STORM SHIELD FOR BATHING STRUCTURE

CROSS-REFERENCE TO RELATED APPLICATION

The present application is a divisional application which claims priority to U.S. Non Provisional application Ser. No. 14/815,793 titled "Storm Shield For Bathing Structure" filed Jul. 31, 2015, which claims priority to U.S. Provisional Patent Application No. 62/031,598 titled "Storm Shield for Bathing Structure," filed Jul. 31, 2014, both of which are hereby incorporated by reference in their entireties.

BACKGROUND

The present disclosure relates generally to protective structures for securing persons, animals, or property. More particularly, the present disclosure relates to storm shelter apparatuses for use inside buildings such as homes and businesses.

Various types of protective enclosures for use as storm shelters are generally known in the art. Most conventional storm shelters are subterranean structures that form an enclosure that people seek shelter in during storms. Conventional subterranean storm shelters are generally too expensive for many people. Additionally, subterranean storm shelters require available land for installation. Conventional subterranean shelters are often difficult to use, obtrusive, messy, and take a long time to install.

Many homes have no dedicated storm shelters either in the home or within a reasonable distance thereof due primarily to installation and material costs of traditional subterranean shelters. Others have attempted to develop above-the-ground storm shelters. However, conventional above-the-ground storm shelters are often expensive and often do not include an aesthetically pleasing exterior. Additionally, above-the-ground storm shelters may be difficult to access during a storm when people are inside a building and must go outside to get to the exterior storm shelter.

As a consequence, residents are often forced to identify and temporarily occupy a structurally enhanced portion of a residence or office as a shelter during severe weather. The dangers associated with disasters such as hurricanes, tornadoes, earthquakes, and storms often include the potential for flying debris and/or the collapse of building materials. Many safety guidelines for severe weather instruct individuals to move to a basement, closet, or bathtub during bad weather. In such situations, individuals often get in a bathtub due to the relative strength of the bathtub wall materials. However, one problem with this solution is that bathtubs are open on the top. Therefore, although bathtubs may offer reinforced material to protect from the sides, bathtubs generally do not protect from debris falling from above.

In further applications, people may seek temporary shelter inside a building in a shower. Showers typically include tiled walls that may provide some protection in the event of a disaster such as a hurricane, tornado or earthquake. People may also seek protection in other reinforced areas such as stairwells or under desks. However, these solutions are inadequate in the event of a disaster because such structures may not fully enclose and protect individuals, animals, or property in the event of severe weather or disasters.

What is needed, then, are improvements to storm shelter structures for use inside buildings, including, but not limited to, homes, apartments, businesses, medical facilities, and offices.

BRIEF SUMMARY

The present disclosure provides a storm shield apparatus for use in a building such as a home, apartment, business, medical facility, or office.

The storm shield apparatus, or storm shelter apparatus, includes a retractable shield that a user may position over an opening in a bath structure, or bathing fixture, such as a bathtub or shower. The shield is moveable between a first stowed position allowing normal operation of the bathtub or shower and a second deployed position at least partially covering the bath structure.

The shield includes edges that are moveable along a track. The track may either be formed integrally into a structure surrounding the bathtub or shower, or in other embodiments the track includes a modular track component that is installed on the surrounding environment.

The track location may be customized to provide a variety of embodiments for the travel path of the shield between the stowed and deployed positions.

In some embodiments, the shield includes a reinforced material such as a metal or composite shield having a plurality of segments (e.g., plates) joined together at flexible joints to allow the shield to achieve a curved profile during use. In some embodiments, the shield may be housed in a wall and/or other structure, such as a shield housing. In some embodiments the shield can be rolled onto a spool that may or may not be housed within a shield housing. The shield that is in a stowed position, including shields that are on a spool or in a shield hosing, can be stored near or in the bathing structure when not in use. When the shield is needed, the shield may be moved along the track by a user to cover a portion of the bathing structure (e.g., tub or shower), including an opening of the bathing structure.

In the event of inclement weather, a user may get inside the bathing structure, or may place property or pets inside the tub or shower, and deploy the shield along the track. The space enclosed between the shield and the bathing structure provides a secure enclosure. The shield may be locked in position in the deployed (extended) and/or in the stowed (retracted) position.

In this regard, an object of the present disclosure is to provide a shield apparatus that may be used to protect people, animals, or property in the event of severe weather such as tornadoes or hurricanes. Another objective of the present disclosure is to provide a shield that may be used to protect people, animals or property during other disasters, such as earthquakes, wildfires, and/or home intrusions.

In some embodiments, the present disclosure provides a storm shield apparatus including a bathing structure and a shield positioned on the bathing structure. The shield has a first shield edge and a second shield edge opposite the first shield edge. A first track is positioned proximate the first shield edge, and a second track is positioned proximate the second shield edge. The shield is selectively moveable along the first and second tracks relative to the bathing structure between a stowed position and a deployed position.

In additional embodiments, the present disclosure provides a storm shield apparatus including a bathing structure, a first track, a second track opposite the first track, and a shield positioned on the bathing structure. The shield is selectively moveable relative to the bathing structure along the first and second tracks between a stowed position and a deployed position. The shield at least partially covers the bathing structure when the shield is in the deployed position to provide protection to persons, pets or property residing in the bathing structure.

In yet further embodiments, the present disclosure provides a shield apparatus comprising a structure that includes four sides and an opening configured to receive a bathing structure, where the four sides are defined by a first end plate, a second end plate, a first longitudinal plate, and a second longitudinal plate. The shield further includes a shield that is comprised of a plurality of segments that are adapted for telescopic movement between a retracted position and an extended position, and the shield includes a first longitudinal shield edge and a second longitudinal shield edge. The shield includes a first longitudinal track extending between the first plate end plate and the second end plate along a first longitudinal edge of the bathing structure, the first longitudinal track being configured to slidably receive the first longitudinal shield edge. The shield further includes a corresponding second longitudinal track that extends between the first end plate and the second end plate along a second longitudinal edge of the bathing structure, the second longitudinal track being configured to slidably receive the second longitudinal shield edge. In this manner, when the shield is in the deployed position in which the segments of the shield are extended, the shield covers a bathing structure opening.

Another object of the present disclosure is to provide a shield apparatus suitable for new construction or replacement or retrofitting of existing bathing structures such as showers and bathtubs. The shield may be used with single or multi-family units, new construction and/or retrofit and remodeling applications.

Another object of the present disclosure is to provide a storm shield for a bathing structure such as a bathtub or shower, the shield including interior illumination such as illumination by LED lights.

Another object of the present disclosure is to provide a storm shield for a bathing structure such as a bathtub or shower, the shield including ventilation ports and/or active ventilation using forced air flow. Forced air flow may be provided from a fan, reservoir of compressed gas, or the like.

Another object of the present disclosure is to provide a storm shield for a bathing structure such as a bathtub or shower, the shield including a Personal Locator Beacon or sounding alarm to notify rescue workers as to location.

Another object of the present disclosure is to provide a storm shield for a bathing structure such as a bathtub or shower, the shield including an emergency radio band-equipped radio to keep occupants apprised of storm conditions.

Another object of the present disclosure is to provide a storm shield for a bathing structure such as a bathtub or shower, the shield including an optional two-way communication system to enable direct contact with rescue workers or others.

Another object of the present disclosure is to provide a storm shield for a bathing structure such as a bathtub or shower, the shield made of readily available materials such as metals, porcelains, polymers, reinforced fiberglass, as well as optional innovative materials such as carbon composites in order to reduce weight.

Another object of the present disclosure is to provide a storm shield for a bathing structure such as a bathtub or shower, the shield including an integrated battery to power one or more devices listed above. Instructions may recommend semi-annual battery replacement similar to those being suggested for residential smoke and carbon dioxide detectors (daylight savings time changes).

A further object of the present disclosure is to provide a storm shield apparatus including a base plate as well as a first end plate that is spaced apart from a second end plate. A shield extends between the space provided between the first and second end plates, a first track is provided on the first end plate, a second track is provided on the second end plates. Furthermore, the space between the first and second end plates can receive a bathing structure, and the shield is moveable along the first and second tracks to selectively cover the bathing structure.

In some embodiments, the first and second tracks define a convex profile over the bathtub our outside a shower to provide arch strength to protect against falling and flying debris. In this regard, the first and second tracks define an arcuate path over the bathtub in some embodiments.

Further objects of the present disclosure provide a shield for a bathing structure. The shield includes a shield member selectively moveable relative to the bathing structure for covering the opening of the bathing structure.

Another object of the present disclosure provides a bathing structure including a wall beside the bathtub, a gap between the bathing structure and the wall, a track positioned adjacent the gap, and a retractable shield positioned to travel on the track, wherein the shield is extendable through the gap to cover the bathing structure.

A further object of the present disclosure provides a storm shield including a track in a wall or other structure along which a shield may travel to selectively cover a bathing structure.

Numerous other objects, features and advantages of the present disclosure will be readily apparent to those skilled in the art upon a reading of the following disclosure when taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** illustrates a partial cross-sectional perspective view of an embodiment of a storm shield apparatus in a stowed position.

FIG. **2** illustrates a partial cross-sectional perspective view of an embodiment of a storm shield apparatus in a partially-deployed position.

FIG. **3** illustrates a perspective view of an embodiment of a storm shield apparatus in a stowed position.

FIG. **4**A illustrates a cross-sectional schematic view of an embodiment of a storm shield apparatus in a stowed position.

FIG. **4**B illustrates a cross-sectional schematic view of an embodiment of a storm shield apparatus in a deployed position.

FIG. **5** illustrates a cross-sectional schematic view of an embodiment of a storm shield apparatus in a stowed position.

FIG. **6** illustrates a cross-sectional view of an embodiment of a storm shield apparatus in a stowed position.

FIG. **7** illustrates a cross-sectional view of an embodiment of a storm shield apparatus in a stowed position.

FIG. **8** illustrates a perspective view of an embodiment of a trough for use with a storm shield apparatus.

FIG. **9** illustrates a partial cross-sectional perspective view of an embodiment of a storm shield apparatus.

FIG. **10** illustrates a partial cross-sectional perspective view of an embodiment of a storm shield apparatus.

FIG. **11** illustrates cross-sectional view of an embodiment of a storm shield apparatus with a shield in a stowed position.

FIG. **12** illustrates a cross-sectional view of an embodiment to of a storm shield apparatus with a shield in a deployed position.

FIG. **13** illustrates a partial cross-sectional perspective view of an embodiment of a storm shield apparatus.

FIG. **14** illustrates a partial cross-sectional perspective view of an embodiment of a storm shield apparatus.

FIG. **15** illustrates a side view of an embodiment of a storm shield apparatus.

FIG. **16** illustrates a side view of an embodiment of a storm shield apparatus.

FIG. **17** illustrates a side view of an embodiment of a storm shield apparatus.

DETAILED DESCRIPTION

Referring now to the drawings, various embodiments of structural features associated with the present invention are generally illustrated and described. The embodiments shown in the drawings the description below are not intended to limit the scope of the Claims, and the illustrations are shown as exemplary embodiments of some modes of carrying out the claimed invention.

Referring to FIG. **1**, an embodiment of a storm shield apparatus **10** is illustrated in a partial cross-sectional perspective view. Storm shield apparatus **10** includes a shield **12** that is selectively moveable to cover a bathing structure **48** such as a bathtub or shower. Shield **12** is selectively moveable between a stowed position and a deployed position. During everyday use of the bathing structure, the storm shield apparatus **10** is stowed and out of the way, and the storm shield apparatus does not interfere with normal operation of the bathing structure. In the event of inclement weather or natural disasters such as storms, hurricanes, earthquakes, tornadoes or other disruptive conditions, one or more people may enter the bathing structure and deploy the storm shield apparatus to cover and protect the space between the bathing structure and the storm shield. The storm shield protects the interior space from falling and wind-driven debris.

Referring to FIG. **1**, storm shield apparatus is shown in a stowed position with a portion of shield **12** housed in a space between bathing structure **48**, a floor **40** on which the bathing structure is mounted, and rear wall **46** against which bathing structure **48** is positioned. For example, conventional bathtubs include a space between the bathtub cavity **54** and the floor **40** and rear wall **46**. The space provides a region for running plumbing, or is otherwise kept empty upon installation of the bathing structure. Storm shield apparatus **10** utilizes this space to house a stowable shield **12** may be selectively deployed from the space to provide a protective cover over the bathing structure. During a period of inclement weather, one or more persons or pets may get in the bathing structure **48** and then deploy the storm shield apparatus **10** from this space to provide a protective cover.

Referring to FIG. **2**, shield **12** is moveable along a track **30** during deployment and stowage. In some embodiments, shield **12** includes a multi-segment barrier made of multiple sections **14***a*, **14***b*, **14***c*, **14***d*, etc. forming a flexible shield similar to a roll-top desk. The multiple sections are joined together at longitudinal joints that allow each rigid section to flex relative to its adjacent sections. A handle **36** on shield **12** allows a user positioned in the bathing enclosure to manually lift the shield **12** and move shield **12** along the track **30** to cover the bathing enclosure. In additional embodiments, shield **12** is linked to a powered actuator and a control to allow a user to deploy and stow shield **12** using the control.

As seen in FIG. **2**, in some embodiments, track **30** includes a first track section **32** and a second track section **34**, shown in FIG. **3**. First and second track sections are positioned at opposite axial ends of shield **12** such that a first axial shield end **22** travels along first track section **32**, and a second axial shield end **24** travels along second track section **34**. First and second track sections **32**, **34** may be formed into corresponding end walls **42**, **44** respectively positioned at the ends of the bathing structure **48**. Shield **12** is rolled on a spool **56** in some embodiments at a position under tub deck **60** on bathing enclosure **48**. As a user lifts handle **36**, shield **12** is unrolled from spool **56** and shield **12** travels along a path defined by track **30**. Track **30** includes an arcuate track forming a semi-circular path in some embodiments as shown in FIGS. **1-3**. As seen in FIG. **3**, in some embodiments, shield **12** extends through tub deck **60** via a tub deck opening **62** allowing passage of shield **12** from a stowed position to a deployed position. In other embodiments, shield **12** extends from a gap between the longitudinal edge of the tub deck and the rear wall **46**.

Shield **12** includes first and second shield edges that move along track sections. First shield edge on shield **12** includes a first axial edge **22** that moves along first track section **32**, and second shield edge on shield **12** includes a second axial edge **24** that moves along second track section **34** as shown in FIGS. **2** and **3** in some embodiments. Alternatively, first shield edge on shield **12** includes a first longitudinal edge **26** that moves along first track **32**, and second shield edge on shield **12** includes a second longitudinal edge **28** that moves along second track **34**. as shown in FIG. **13**.

Track **30** can include many configurations. In some embodiments, first and second track sections **32**, **34** are recessed into first and second end walls **42**, **44**, respectively. In additional embodiments, first track section **32** includes a separate track member that is installed on first end wall **42** using one or more fasteners, and second track section **32** includes a separate track member that is installed on second end wall **44** using one or more fasteners. In some embodiments, each track section includes a C-shaped cross-sectional profile to retain a corresponding feature on shield **12** in a locking manner. For example, one or more corresponding rollers or track carriages extend from first axial end **22** of shield **12** and engage and travel along first track section **32**. Similarly, one or more corresponding rollers or track carriages extend from second axial end **24** of shield **12** and engage and travel along second track section **34**.

Shield **12** may be deployable from either side of bathing structure **48**, as seen in FIGS. **4**A-**7** in different configurations. As shown in FIG. **4**A, shield **12** winds and unwinds on a spool **56** on the side of bathing enclosure **48** adjacent rear wall **46**. Spool **56** may be housed in a longitudinal spool casing **57** in some embodiments. From this position, shield **12** may be deployed upwardly along track **30**. As shield **12** travels along track **30**, spool **56** unwinds and handle **36** approaches the front side of the bathing enclosure. In some applications, track **30** terminates on the tub deck at or near the top front edge of the tub on the tub deck. In other embodiments, track **30** extends to the exterior of the tub skirt **58** and travels to the floor to a shield lock **66** that receives and engages the front longitudinal edge of the shield **12** to lock the shield in place. As seen in FIG. **6**, spool **56** may be positioned in some embodiments in rear wall **46**. In alternative embodiment, as seen in FIG. **7**, spool **56** is located in a space under the bathing structure **48** adjacent or near the tub skirt **58** on the front side of the bathing enclosure. In this embodiments, shield **12** moves along track **30** in a direction from the front side of the bathing enclosure toward the rear wall **46**.

In some additional embodiments, storm shield apparatus **10** includes a two-component system including a shield **12** and a base trough **70**, shown in FIGS. **8-12**. Base trough **70** includes a five-sided trough having a bottom panel **72**, a first side panel **78**, a second side panel **80**, a first end panel **74** and a second end panel **76**. Each panel includes a rigid material such as a metal plate. Each panel may be rigidly joined together with adjacent panels using fasteners or welds. Trough **70** provides an internal trough cavity **84** shaped to receive the basin **54** portion of a bathing enclosure **58** such as a bathtub. Many bathing enclosures are made of molded plastic or other similar materials that offer little resistance to penetration by wind-driven debris. Shield **12** covers the space above the bathing enclosure, but the lower portion of the bathing enclosure may remain susceptible to impact by debris during a disaster. Trough **70** provides reinforcement on each side of the bathing structure from below, from the sides, and from the ends, thereby providing a protective shield for the volume enclosed by the tub basin **54**.

First side panel **78** on trough **70** includes a first upper edge **86**, and second side panel **80** includes a second upper edge **88**. A bathtub deck **60** may rest against the front and rear upper edges **86**, **88** when a bathtub is positioned on the trough **70**, as seen in FIG. **9**. Trough **70** is dimensioned such that first side panel **78** is received between tub skirt **58** and tub basin **54**, as shown in FIG. **9**, when the bathing structure is lowered onto the trough **70**. FIG. **9** and FIG. **10** are shown with partial cutaway views with the end of the trough shown as open to illustrate the internal positioning of the trough panels. However, during use, each end of trough **70** is closed by first and second end panels **74**, **76** respectively, as shown in FIG. **8**. Each end panel **74**, **76** protects the axial ends of the tub from incident debris from those directions. Additionally, as seen in FIG. **8**, each end panel **74**, **76** has a height greater than the height of first and second side panels **78**, **80**. Shield **12** is deployable between the raised portions of first and second end panels **74**, **76** as seen in FIG. **10**. For example, in some embodiments, first track section **32** is disposed on first end panel **74** on trough **70**, and second track section **34** is disposed on second end panel **76** on trough **70**. As noted above, first track section **32** is recessed into first end panel **74** in some embodiments, and second track section **34** is recessed into second end panel **76** in some embodiments. Each track section is shaped to receive one or more corresponding rollers or track carriages disposed on the axial ends of panel **12**.

Storm shield apparatus **10** may be installed in a new construction residence, or installed as a retrofit of an existing bathing structure location. In some embodiments, an existing structure such as a bathtub may be removed entirely, and trough **70** placed in the location where the bathing structure was formerly positioned. A new bathing structure including a shield **12** may be positioned in the trough **70**. In some embodiments, trough **70** includes a first end panel **74** having one or more plumbing openings **64** to allow passage of faucet **50** or valve control knobs, as seen in FIG. **8**.

As seen in FIG. **11**, shield **12** may be stowed in a position between trough **70** and tub basin **54** on spool **56**. Shield **12** may be raised via handle **36** through tub deck opening **62**. In some embodiments, first side panel **78** on trough **70** extends upwardly on the interior side of tub skirt **58**. As such, the upper edge **86** of first side panel **78** provides support for tub deck **60**. A shield receiver **33** may be positioned on tub deck **60** directly above first side panel **78**. Shield receiver **33** receives and mates with a corresponding structure on the front longitudinal edge of shield **12**. Shield receiver **33** is secured directly to first side panel **78** using one or more fasteners that extend through tub deck **60** in some embodiments. As seen in FIG. **12**, in some embodiments shield **12** includes a rear longitudinal edge **28** including an edge stop to stop the upward travel of shield **12** during deployment. When shield **12** is engaged to shield receiver **33** in a deployed position, the volume between shield **12** and trough **70** is enclosed by rigid protective panels on trough **70** and by the shield material in shield **12**.

As seen in FIGS. **8-10**, trough **70** is designed to provide structural protection for one or more persons or pets positioned in tub basin **54** from the sides and from below. Trough **70** includes one or more vent holes **82** positioned on one or more panels, as seen in FIG. **8**. Each vent hole allows passage of air so that persons or pets positioned in the enclosure may be able to breathe for an extended period of time.

Referring now to FIGS. **13-17**, alternative embodiments of the storm shield apparatus **10** include a shield that moves longitudinally from one end of a bathing structure to the other. Shield **12** includes a segmented shield comprising a plurality of arcuate sections that slide relative to one another in a nesting or telescoping arrangement. Each section forms a semi-cylinder in some embodiments.

Referring to FIGS. **13** and **14**, shield **12** includes multiple sections **14***a*, **14***b*, **14***c*, **14***d*, **14***e*. Each shield section slides along first and second tracks **32**, **34**. Each shield section in this embodiment includes an front longitudinal edge and a rear longitudinal edge. First track **32** is positioned in a longitudinal direction along the front upper surface of tub deck **60**, and second track **34** is positioned in a longitudinal direction along the rear upper surface of tub deck **60**, as seen in FIG. **13**. Shield **12** may be fully or partially recessed behind first end panel **74** in the stowed position. During use, a user may pull the shield out from the stowed position such that the shield sections slide along the track members **32**, **34** to a deployed position shown in FIG. **14**. In some embodiments, a shield receiver **33** is positioned on second end wall **44** or second end panel **76** to receive and engage the axial edge of the end shield section to lock the shield **12** in a deployed position, as seen in FIG. **14**.

Shield **12** can include various sizes and numbers of shield sections, as seen in FIGS. **15-17**. Shield sections generally nest relative to each other in a stowed position, as seen in FIG. **15** in some embodiments. When deployed, the shield sections slide relative to each other along track **30** to cover the bathing structure **48**. In some embodiments, shield **12** includes three shield sections. In other embodiments, shield **12** includes four shield sections. In further embodiments, shield **12** includes five shield sections. In various other embodiments, shield **12** may include between three and thirty shield sections.

In some embodiments, trough **70** is dimensioned such that shield **12** extends from first end panel **74** to second end panel **76** and from the first side panel **78** to the second side panel **80**, thereby providing a complete enclosure between the trough **70** and the shield **12**.

Although the storm shield apparatus is shown in several sFigures with the bathing structure **48** being a bathtub, the storm shield apparatus **10** may be used with other types of bathing structures, including showers.

Thus, although there have been described particular embodiments of the present invention of a new and useful Storm Shield for Bathing Structure it is not intended that such references be construed as limitations upon the scope of this invention except as set forth in the following claims.

What is claimed is:

1. A storm shield apparatus, comprising:

a bathing structure comprising a tub skirt, wherein the bathing structure is disposed adjacent to a rear wall, and wherein the tub skirt is disposed opposite the rear wall;

a shield; and

a track positioned on at least one end wall above the bathing structure wherein

the track extends in an arcuate shape from the adjacent rear wall to the tub skirt,

the track is configured to slidably receive the shield,

the shield is selectively moveable between a stowed position and a deployed position, and

the shield, when in the deployed position, forms an enclosed space between the shield and a top of the bathing structure.

2. The apparatus of claim **1**, wherein the shield includes an arcuate shape when in the deployed position.

3. The apparatus of claim **1**, wherein shield includes a multi-segment barrier.

4. The apparatus of claim **3**, wherein the multi-segment barrier comprises a plurality of sections coupled at longitudinal joints.

5. The apparatus of claim **1**, wherein the shield is configured to be rolled on a spool.

6. The apparatus of claim **5**, wherein the spool is positioned at the adjacent rear wall of the bathing structure.

7. The apparatus of claim **1**, wherein the shield is configured to engage with a shield lock that engages the shield to lock the shield in place.

8. The apparatus of claim **1**, further comprising:

a trough including a first end panel, a second end panel, a first side panel, a second side panel, and a bottom panel,

wherein the bathing structure is positioned on the trough between the first and second end panels.

9. The apparatus of claim **8**, wherein the track comprises a first track positioned on the first end panel, and a second track positioned on the second end panel.

10. The apparatus of claim **9**, further comprising a spool positioned between the bathing enclosure and the trough.

11. The apparatus of claim **10**, wherein the shield is rolled on the spool when the shield is in a stowed position.

12. A storm shield apparatus, comprising:

a bathing structure;

a first track;

a second track opposite the first track; and

a shield positioned on the bathing structure, the shield selectively moveable relative to the bathing structure along the first and second tracks between a stowed position and a deployed position,

wherein

the first track is disposed on a first end wall above the bathing structure and the second track is disposed on a second end wall above the bathing structure,

each of the first track and the second track extend in an arcuate shape from a rear wall adjacent the bathing structure to a tub skirt disposed opposite the rear wall,

the shield forms an enclosed space between the shield and a top of the bathing structure when the shield is in the deployed position.

13. The apparatus of claim **12**, wherein the shield includes an arcuate shape when in a deployed position.

14. The apparatus of claim **13**, further comprising:

a first end panel disposed on a first longitudinal edge of the bathing structure;

a second end panel disposed on a second longitudinal edge of the bathing structure opposite the first end panel;

wherein the first track is disposed on the first end panel and the second track is disposed on the second end panel.

15. The apparatus of claim **14**, wherein the first track is recessed into the first end panel and the second track is recessed into the second end panel.

16. The apparatus of claim **12**, wherein shield is a multi-segment barrier comprising a plurality of sections coupled at longitudinal joints.

17. A storm shield apparatus, comprising:

a bathing structure;

a shield including a multi-segment barrier and positioned on the bathing structure, the shield selectively moveable between a stowed position and a deployed position,

wherein

the shield extends over the bathing structure in an arcuate shape when in the deployed position, and

the shield forms an enclosed space between the shield and a top of the bathing structure when the shield is in the deployed position.

18. The apparatus of claim **17**, further comprising an arcuate track configured to receive the shield.

19. The apparatus of claim **18**, wherein the arcuate track further comprises a first track section disposed on a first end wall and a second track section disposed on a second end wall.

20. The apparatus of claim **19**, wherein the shield further comprises a first axial edge configured to move along the first track section and a second axial edge configured to move along the second track section.

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